



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Tr

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,302	12/31/2003	Chandrasekaran N. Gupta	X-1439 US	1788
24309	7590	10/03/2006	EXAMINER	
XILINX, INC			CHANG, ERIC	
ATTN: LEGAL DEPARTMENT			ART UNIT	PAPER NUMBER
2100 LOGIC DR				
SAN JOSE, CA 95124			2116	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/749,302	GUPTA ET AL.	
	Examiner	Art Unit	
	Eric Chang	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 July 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 8-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 8-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Claims 8-20 are pending.

Claim Rejections - 35 USC § 112

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by the phrase "storage device enabled responsive to output of the receive portion". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,941,433 to Libby et al.

5. As to claim 8, Libby discloses a delay compensation system, comprising: a first integrated circuit [105], the first integrated circuit including output drivers, one of the output drivers configured to provide a transmit clock signal and another of the output drivers configured

to provide a read command signal [FIG. 1]; and a second integrated circuit [110] coupled to the first integrated circuit to receive the transmit clock signal and the read command signal, the second integrated circuit configured to provide a read clock signal responsive to the transmit clock signal and to provide a data signal responsive to the read command signal [FIG. 1]; the first integrated circuit including a delay compensation circuit, the delay compensation circuit [205] configured to operate synchronously with the transmit clock signal for a send portion and to operate synchronously with the read clock signal on a receive portion. [col. 1, lines 57-64].

6. As to claim 9, Libby discloses the delay compensation circuit comprises a counter configured to count clock pulses to track latency of the second integrated circuit [col. 4, lines 57-65].

7. As to claim 10, Libby discloses the send portion and the receive portion are coupled to one another via a loopback trace [FIG. 2, and col. 3, lines 40-49].

8. As to claim 11, Libby discloses the circuits are mounted to a printed circuit board and coupled by traces [col. 1, lines 33-37].

9. As to claim 12, Libby discloses the send portion and the receive portion are coupled to one another via a loopback trace [FIG. 2, and col. 3, lines 40-49].

10. As to claim 13, Libby discloses the first circuit is conventional data processing system [col. 1, lines 8-15]. It is well known in the art that a FPGA is a conventional data processing system that uses random access memories.

11. As to claim 14, Libby discloses the second circuit is a memory [110].

12. As to claim 15, Libby discloses the transmit clock signal is generated using a first clock signal [150] and the read command signal is generated using a second clock signal [245].

13. As to claim 16, Libby discloses the first clock is used to clock the send portion [col. 3, lines 29-60].

14. As to claims 17-18, Libby discloses the first and second clock and clock pulses are separate signals from a same clock source [col. 1, lines 24-29]. Furthermore, it is well known in the art that data processing systems use digital clocks.

15. As to claim 19, Libby discloses the first clock is a phase-shifted version of the second clock signal [col. 3, lines 47-52 and col. 5, lines 2-4].

16. As to claim 20, Libby discloses the first circuit comprises at least one storage device responsive to the output of the receive portion [210].

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (571) 272-3671. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 26, 2006
ec



LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100